Amend the following claims:

1. (Amended) In the manufacture of a magnetic recording medium, a method of varying coercivity comprising the steps of:

a) providing a substrate for supporting magnetic layers;

b) sputtering on the substrate an underlayer having a lattice structure for matching with a magnetic layer lattice structure;

c) sputtering a first magnetic layer on the underlayer, the first magnetic layer having a first alloy composition and a first coercivity; and

d) sputtering a second magnetic layer on and in contact with the first magnetic layer, the second magnetic layer having a second alloy composition which differs from the first alloy composition and a second coercivity which differs from the first coercivity, whereby a coercivity of the two magnetic layers is between the first and second coercivities and is determined by the relative thicknesses of the two magnetic layers.

9. (Amended) The method as defined by claim 8 wherein step a) includes providing a substrate that is nickel phosphorus or ceramic glass.

11. (Amended) A magnetic recording medium, comprising:

a substrate;

an underlayer supported by the substrate;

a first magnetic layer on the underlayer, said first magnetic layer having first alloy composition and a first coercivity; and

a second magnetic layer on and in contact with the first magnetic layer, the second magnetic layer having a second alloy composition which differs from the first alloy composition and a second coercivity which differs from the first coercivity, whereby a coercivity of the two magnetic layers is between the first and second coercivities and is determined by a relative thickness of the first magnetic layer to the thickness of the two magnetic layers.

16. (Amended) The magnetic recording medium as defined by claim 13 wherein the first magnetic layer comprises an alloy having a composition of Co-20Cr-10Pt-8B, and the second magnetic layer comprises an alloy having a composition of Co-20Cr-8Pt-4Ta.

17. (Amended) The magnetic recording medium as defined by claim 13 wherein the first magnetic layer comprises an alloy having a composition of Co-20Cr-8Pt-4Ta, and the second magnetic layer comprises an alloy having a composition of Co-18Cr-6Pt-3Ta.

18. (Amended) The magnetic recording medium as defined by claim 11 wherein the substrate is nickel phosphorus or ceramic glass, and the underlayer is chromium or chrome alloy.

19. (Amended) The magnetic recording medium as defined by claim 18 and further including a seedlayer between the underlayer and the substrate, a carbon overcoat layer over the second magnetic layer, and a lubricant layer on the carbon overcoat layer.

20. (Amended) A method for establishing a coercivity of magnetic recording material on a substrate comprising the steps of providing a substrate and at least two cobalt based alloy magnetic layers sputtered in sequence on the substrate and in contact with one another, wherein the first magnetic layer has a first composition and a first coercivity, the second magnetic layer has a second composition and a second coercivity, with the relative thicknesses of the two magnetic layers determining the coercivity, and the coercivity being between the first and second coercivities.

Add the following claims:

21. A magnetic recording medium, comprising:

a substrate;

a first magnetic layer over the substrate, wherein the first magnetic layer has a first alloy composition, a first coercivity and a first remanence; and

a second magnetic layer on and in contact with the first magnetic layer, wherein the second magnetic layer has a second alloy composition, a second coercivity and a second remanence, the first and second alloy compositions are different, the first and second coercivities are different, the first and second remanences are the same, and a coercivity of the medium is between the first and second coercivities.

22. The magnetic recording medium as defined by claim 21 wherein the first and second alloy compositions are quaternary alloy compositions.

23. The magnetic recording medium as defined by claim 22 wherein the first and second alloy compositions have the same four elements.

24. The magnetic recording medium as defined by claim 23 wherein the first alloy composition is Co-20Cr-10Pt-8B and the second alloy composition is Co-22Cr-10Pt-6B.

25. The magnetic recording medium as defined by claim 23 wherein the first alloy composition is Co-20Cr-10Pt-8B and the second alloy composition is Co-26Cr-10Pt-6B.

26. The magnetic recording medium as defined by claim 23 wherein the first alloy composition is Co-20Cr-8Pt-4Ta and the second alloy composition is Co-18Cr-6Pt-3Ta.

27. The magnetic recording medium as defined by claim 22 wherein the first and second alloy compositions have the same three elements and a different fourth element.

28. The magnetic recording medium as defined by claim 27 wherein the first alloy composition is Co-20Cr-10Pt-8B and the second alloy composition is Co-20Cr-8Pt-4Ta.

29. The magnetic recording medium as defined by claim 21 wherein the first and second magnetic layers are deposited under the same deposition conditions.

30. The magnetic recording medium as defined by claim 21 wherein the coercivity of the medium is determined by the thickness fraction $t_{Mag1}/(t_{Mag1} + t_{Mag2})$ where t_{Mag1} is the thickness of the first magnetic layer and t_{Mag2} is the thickness of the second magnetic layer.

31. A magnetic recording medium, comprising:

a substrate;

a first magnetic layer over the substrate, wherein the first magnetic layer has a first alloy composition, a first coercivity and a first remanence and is sputter deposited over the substrate under a first deposition condition that includes a temperature and bias of the substrate; and

a second magnetic layer on and in contact with the first magnetic layer, wherein the second magnetic layer has a second alloy composition, a second coercivity and a second remanence and is sputter deposited on the first magnetic layer under a second deposition condition that includes a temperature and bias of the substrate, the first and second alloy compositions are different, the first and second coercivities are different, the first and second deposition conditions are the same, and a coercivity of the medium is between the first and second coercivities.

32. The magnetic recording medium as defined by claim 31 wherein the first and second alloy compositions are quaternary alloy compositions.

33. The magnetic recording medium as defined by claim 32 wherein the first and second alloy compositions have the same four elements.

34. The magnetic recording medium as defined by claim 33 wherein the first alloy composition is Co-20Cr-10Pt-8B and the second alloy composition is Co-22Cr-10Pt-6B.

35. The magnetic recording medium as defined by claim 33 wherein the first alloy composition is Co-20Cr-10Pt-8B and the second alloy composition is Co-26Cr-10Pt-6B.

36. The magnetic recording medium as defined by claim 33 wherein the first alloy composition is Co-20Cr-8Pt-4Ta and the second alloy composition is Co-18Cr-6Pt-3Ta.

37. The magnetic recording medium as defined by claim 32 wherein the first and second alloy compositions have the same three elements and a different fourth element.

38. The magnetic recording medium as defined by claim 37 wherein the first alloy composition is Co-20Cr-10Pt-8B and the second alloy composition is Co-20Cr-8Pt-4Ta.

39. The magnetic recording medium as defined by claim 31 wherein the first and second remanences are the same.

40. The magnetic recording medium as defined by claim 31 wherein the coercivity of the medium is determined by the thickness fraction $t_{Mag1}/(t_{Mag1} + t_{Mag2})$ where t_{Mag1} is the thickness of the first magnetic layer and t_{Mag2} is the thickness of the second magnetic layer.

41. A magnetic recording medium, comprising:

a substrate;

a first magnetic layer over the substrate, wherein the first magnetic layer has a first alloy composition, a first coercivity and a first remanence; and

a second magnetic layer on and in contact with the first magnetic layer, wherein the second magnetic layer has a second alloy composition, a second coercivity and a second remanence, the first and second alloy compositions are different quaternary alloy compositions,

the first and second coercivities are different, and a coercivity of the medium is between the first and second coercivities.

42. The magnetic recording medium as defined by claim 41 wherein the first and second alloy compositions include Co, Cr and Pt.

43. The magnetic recording medium as defined by claim 42 wherein the first and second alloy compositions have the same four elements.

44. The magnetic recording medium as defined by claim 43 wherein the first alloy composition is Co-20Cr-10Pt-8B and the second alloy composition is Co-22Cr-10Pt-6B.

45. The magnetic recording medium as defined by claim 43 wherein the first alloy composition is Co-20Cr-10Pt-8B and the second alloy composition is Co-26Cr-10Pt-6B.

46. The magnetic recording medium as defined by claim 43 wherein the first alloy composition is Co-20Cr-8Pt-4Ta and the second alloy composition is Co-18Cr-6Pt-3Ta.

47. The magnetic recording medium as defined by claim 42 wherein the first and second alloy compositions have the same three elements and a different fourth element.

48. The magnetic recording medium as defined by claim 47 wherein the first alloy composition is Co-20Cr-10Pt-8B and the second alloy composition is Co-20Cr-8Pt-4Ta.

49. The magnetic recording medium as defined by claim 41 wherein the first and second magnetic layers are deposited under the same deposition conditions.

50. The magnetic recording medium as defined by claim 41 wherein the coercivity of the medium is determined by the thickness fraction $t_{Mag1}/(t_{Mag1} + t_{Mag2})$ where t_{Mag1} is the thickness of the first magnetic layer and t_{Mag2} is the thickness of the second magnetic layer.